CDF Operations Report

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CDF Weekly Meeting

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Store Summary (10/27~11/3)

Store	start Date	time [hours]	initial lumi [E30]	int. lumi delivered [pb^{-1}]	live lumi [pb^{-1}]	GoodRun w/ si [pb^{-1}]	comments
4473	10/27	30.9	166.5	5.72	4.00 70%	3.95 69%	L2 troubles, ToF HV tripped
4475	10/28	25.3	149.1	4.62	3.02 65%	2.86 62%	COT off at start, Pulsar hang up again
4476	10/30	28.9	158.2	5.49	4.24 77%	4.13 75%	L2 problems due to high luminosity
4477	10/31	29.9	170.4	5.65	4.07 72%	4.07 72%	Record Init. Lumi. Startup prob. again
4480	11/2	17.0	159.1	4.02	2.88 72%	0.65 16%	Problem from the start with XFT
4481	11/3		160.4	In progress…			CLC00 Done TO CSL problems,
Total	10/27-11/3	132+	160.6	25.5 pb^{-1}	18.2 pb^{-1} 71.4%	15.7pb^{-1} 61.4%	Smooth running right now ☺

We're having several problems at the start; spent many hours to fix the problems. Hope that CDF can come back to normal operation, ~90% eff., ☺

CDF Operations [I]

- **Store 4473**
  - Down for the 1st 2 hrs due to L2 link problem
  - ToF HV tripped
  - Replace a NIM power supply for the abort gap loss monitor electronics

- **Controlled access** (Friday)
  - Replaced a bad VME processor and the TDC in slot 16

- **Store 4475** (Fri-Sat)
  - 4 hrs downtime due to problems with (1) COT SL0 HV control and (2) L2 decision PC PCI bus **at start**
  - Beam losses also resulted in some downtime in the middle

- **Store 4476** (Sun-Mon)
  - Down for the 1st 1 hr of store due to pilot error (wrong trigger table; resulted in many problems with Silicon handbrake, EVM/L3)
  - BMU HV tripped several times at the end of store

CDF Operations [II]

- **Store 4477** (Mon-Tue)
  - Starts with an Int. Lumi. of 170.4E30 "Record Init. Luminosity"
    → The shot started with a record Recycler stash of 320E10 pbars
  - Two Problems at the start
    (1) COT SL1 HV did not come up , (2) L2 decision PC hung due to PCI bus contention between the L2 card and the hard disk
  - "Noise" in the CLC luminosity measurement – CLC folks are investigating now. (see next slide)

- **Controlled access** (Tuesday)
  - Tracer in b0wcal00 was replaced. There were some collateral problem in b0cot09; fixed.
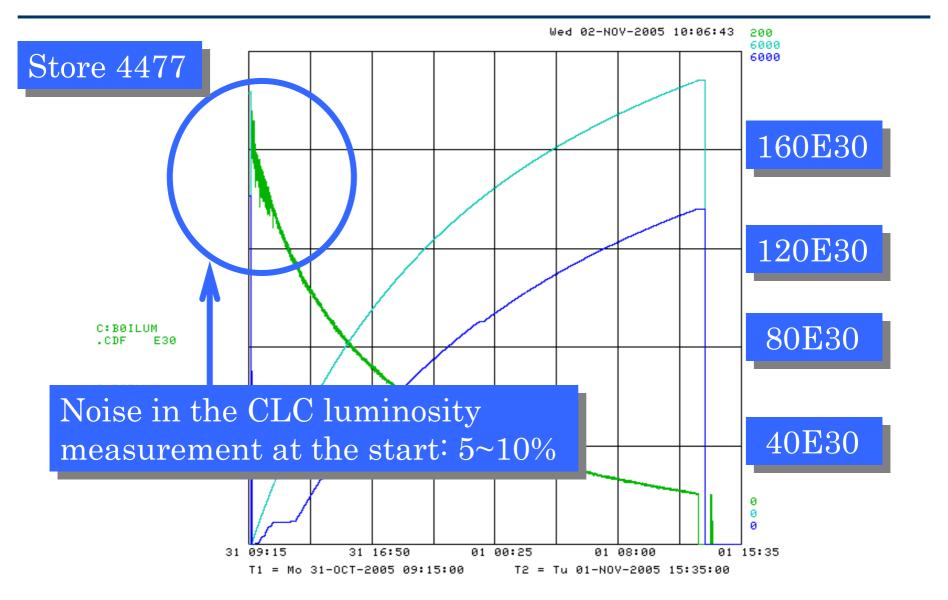 - CMP: North wall stack 21/22 signal cables were un-swapped

- **Store 4480** (Wednesday)
  - Started up smoothly, L2 decision PC didn't hang, but we had trouble with XFT (problem with XFT internal clock) – the data is bad for L1
  - Trigger studies with UPS at 70E30, and Silicon handbrake studies
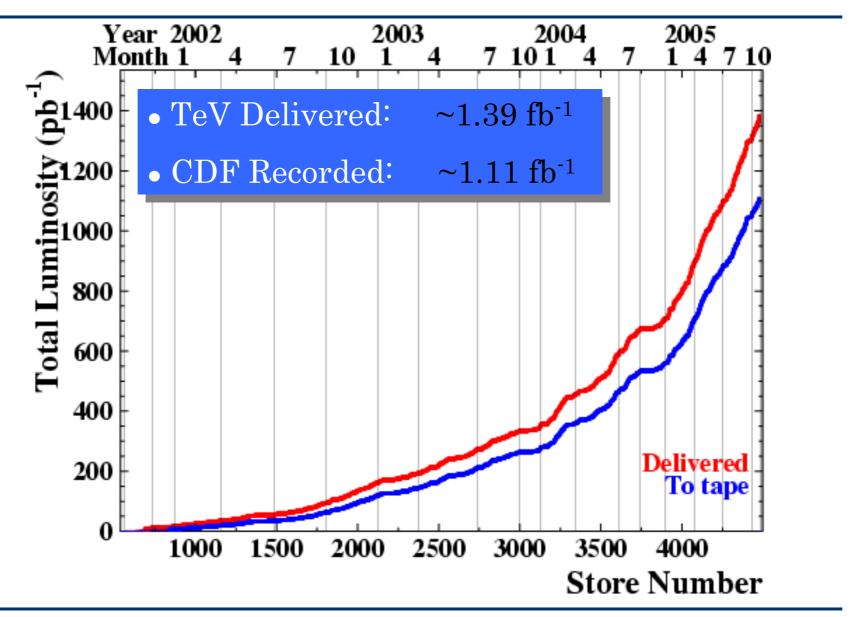 - Beam clean abort (TRF6 tripped)

- **Controlled access** (Wednesday)
  - Swapped the TDCs in slot 7 and 14 in b0cot07, to fix the XFT problem – checkout went fine. - Thanks, Jianrong, Nils and Steve. ☺

Issue on Luminosity Measurement

Run II Integrated Luminosity

Run II Initial Luminosity

TeV Initial Instantaneous Luminosity, Average of Previous 10 Stores: ~156.2E30